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OF CIVIL ENGINEER CORPS OFFICERS OF THE
UNITED STATES NAVY.

TOWARD BETTER MANAGERIAL EFFECTIVENESS

OF CIVIL ENGINEER CORPS OFFICERS OF THE UNITED STATES NAVY

by

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ABSTRACT

TOWARD BETTER MANAGERIAL EFFECTIVENESS

OF CIVIL ENGINEER CORPS OFFICERS OF THE UNITED STATES NAVY

by

LCDR. RICHARD JOSEPH BIEDERMAN

The purpose of this paper will be to examine the role of a
typical Civil Engineer Corps Naval Officer in the organizational
settings in which he is placed by virtue of official and legiti-
mate orders; and through such examination derive concepts, the
application of which will promote greater managerial effective-
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practical experience in the Naval Service with studies in Organi-
zation Behavior at the Sloan School of Industrial Management of
the Massachusetts Institute of Technology.

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Chapter I - INTRODUCTION

The purpose of this paper will be to examine the role of a typical Civil Engineer Corps Naval Officer in the organizational settings in which he is placed by virtue of official and legitimate orders; and through such examination derive concepts, the application of which will promote greater managerial effectiveness. Hopefully this paper will attempt to combine substantial practical experience in the Naval Service with studies in Organization Behavior at the Sloan School of Industrial Management of the Massachusetts Institute of Technology.

To understand the essence of the managerial circumstances of a Civil Engineer Corps Officer (hereafter called CECO) it is first necessary to examine the typical background of such an individual. Basically his education is of a technical nature with little emphasis on the arts and even less on behavioral sciences. His management development program is founded principally on job rotation with some opportunity for formal updating principally at technical levels and some leadership training of the stereotyped lecture variety. The CECO is fundamentally oriented to the classical principle that structure is the essential element for control of organizations and his remedial actions to correct perceived organizational difficulties are to change structure. He would also use technological change and tighter controls to help alleviate organization problems.

Also essential to the understanding of the managerial circumstances of a CECO is the setting or environment in which he is placed. The most basic issue in this environment is its

transient nature. Assignment to major sub-parts or units of the
organization - say a Naval Air Station - is for a limited period
of time of about two to three years duration. The on-going unit
is almost totally composed of Civil Service employees with only
a scattering of military enlisted personnel. In the authority
structure the CECO is many time placed at the head of a functional
group; i.e. the Public Works Officer, the Shops Engineer, the
Project Management Officer, the Housing Officer, etc. Along with
the transient issue herein lies another and possibly equally im-
portant issue, namely: the superposition of a CECO on the rela-
tively stable, hierarchy type of organization of Civil Servants.

From the typical CECO being placed in the environment as de-
scribed there exists a large potential for conflict based largely
on the assumptions and perceptions of the CECO on one hand and
the body of Civil Servants on the other. For example, the CECO
assumes that most Civil Servants require intense motivation and
he thereby relies on control devices for stimulation. He also
assumes that power, communication, and work all follow the organi-
zation authoritative structure and he therefore attempts reorgani-
zation to correct problems in these dimensions. On the other
hand, the Civil Servant sees the CECO as a transient with little
concern for long range tasks or problems. He perceives each CECO
as another "new broom" theorist and grits his teeth for the in-
evitable reorganization. He accepts the contracted legitimate
authority, but insures that the power, work, and communication
follow different channels.

In this sort of frustrating setting the CECO and Civil
Servant struggle to get the job done - sometimes reasonably

effectively and sometimes not effectively at all. However, one
thing is fairly evident, namely: there is not a great deal of
growth on the part of either, and the organizational health does
not improve to any great degree; nor does the organization be-
come adaptive to the external environment or internalize the
techniques to which it has been exposed..

It appears evident that here, as in most things, there is
substantial room for improvement. It would further appear that
certain circumstances of the situation must, at least for the
moment, remain as "givens". I refer principally to the transient
nature of assignments and the hierarchy structure of Civil Ser-
vice. How then can the situation be improved to allow greater
managerial effectiveness by the CECO? It appears that the answer
lies in the attitudes and human behavioral knowledge possessed by
the CECO himself.

Of prime importance is unquestionably the resolution for the
CECO of just where the power really is in his organization; of
just how the job gets done; of where the communication channels
really are. In summary on this point the CECO must have know-
ledge of and understand the informal, dynamic, overlapping nature
of his organization in order to understand the system which is
really at work.

Equally important for the CECO is for him to understand and
capitalize on the true nature of his role - that of a change agent
or consultant who will only have a transient relationship with
the organization and who must, therefore, establish that rela-
tionship, correctly diagnose the problems which arise, help the

organization system to establish methods for solving those problems, and terminate the relationship.

It appears then that as a change project we must alter the relationship and role of the CECO to the organization from one in which he perceives his legitimate authority as a source of power, and further perceives his formal organization structure as highly instrumental, to a relationship where his role is more that of a consultant to diagnose the system's problems and provide help in learning problem solving techniques.

Before proceeding with the organization of this thesis which will conclude this first chapter, I think it necessary to state certain precautions to be observed in reading further into this type of literature. Possibly the best approach to the problem is to state my own personal initial reactions to behavioral science readings, and to state further my observations of tens of individuals as they were initiated to course material in this field. (These persons range in age from 21 to 50 with a typical cross-section including full and part time students and executives from industry.) To sum up my experience and observations I conclude that the neophyte in the behavioral sciences usually has one of the following initial reactions to his exposure:

1. The course material is not consistent with the real world human behavior as perceived by me.

2. There are no well defined solutions that I can apply to people's problems, so the behavioral sciences have limited value.

3. The management of human beings is an art not a science and must therefore be learned by experience.

4. What is being presented here about me as a member of
    management is very threatening (and therefore wrong),
    so I will reject it.

It appears that as study continues most persons exposed to
the behavioral sciences will vacillate from the initial reaction
to all of the four reactions mentioned above. As study becomes
more intense the fallacy of the reactions becomes obvious and
learning begins. Hopefully the early knowledge of the existence
of these fallacies will promote greater understanding of this
thesis.

The organization of this paper will be as follows: Chapter
I has attempted to establish the boundaries of the subject and to
provide general background material. Chapter II will deal with
theory about individuals in order to help understanding and have
insight into ourselves as well as others. Chapter III will
attempt to explore management styles and organization systems,
for it is in this setting that human interaction and its conse-
quences take place. Chapter IV is a logical stepping stone
toward the conclusion of this paper as it portrays some vital
concepts of how to grow a manager, or equally applicable in our
case, a CECO. Chapter V attempts to apply the principles about
individuals, organizations, and management development to help
form the basis for a new relationship for the CECO and the organi-
zation in which he is placed.

This paper hopefully has a theme which is stated as its
title. Naturally the body of theory presented here is limited
and is in support of that theme. It is for the most part

substantiated by empirical data collected in laboratory experi-
ments, field experiments, or both. If intuition creeps in now
and again it is hoped that its presence will stimulate further
study on the part of the reader, which is, of course, another
fundamental purpose of this thesis.

Chapter II - SOME THEORY ABOUT INDIVIDUALS

When one begins to look at individuals and why they behave
as they do, there seems to be a tendency to fall into one of two
camps: the Freudian camp or the McClelland camp. (McClelland
is a member of the Harvard faculty who has been a leader in
motive-achievement.) Basically these camps focus on the follow-
ing concepts:

  ' Freudian - Individual behavior is a result of childhood ex-
        perience, and only by an understanding of those ex-
        periences can an adult adjust his present behavior.
        Essentially the idea is that early childhood is
        governed by impulses (physical and aggressive). How
        those impulses are treated in childhood (say by the
        parents) determines how the child will behave in later
        years. Individual psychiatric help provides the tradi-
        tional way for giving the adult the insight into his
        childhood which he needs to change his present be-
        havior.

  McClelland - Individual behavior, however caused, can be
        changed by constant reinforcement with symbols (ideas);
        i.e., if the person wants to change and is willing to
        be exposed to the symbols he will change his behavior
        as a result of the complete and continuous bombardment
        with ideas. Here the methods of group therapy, group
        dynamics, and peer relationships are the means for
        altering behavior.

Now the good thing about these two theories is that they are not necessarily incompatable, but each does have its trademark. The Freudian is distinguished by Determinism ("Things are the way they are; I can't do too much about them; I'm not responsible for my behavior"). The McClelland ideas are distinguished by Free Will ("I can do something about my life"). On the McClelland side there are two subtheories about how and why people behave. The first is the Interpersonal which makes communication and understanding with one's fellow man of prime importance. A main exponent of this theory is George Goffman who says essentially that our lives are rituals of face work to improve our relationships with people. The second theory is the Existential which says in effect that self-understanding and self-actualization (the full realization of our potential) are the main goals in life and our behavior is governed accordingly. Carl Rogers is one of the leaders of the Existentialists. Again these latter two subtheories on the Free Will side are not necessarily incompatable, but rather they are bound together by the concept that something can be done in the here and now towards personal growth and development of individuals and society.

With the above brief statement of the body of theory available, where shall we dwell to promote fulfillment and realization for the CECO who might read these lines? On which theory shall we rely? Certainly the McClelland or Free Will ideas appear to offer the greatest possibility for individual improvement of large bodies of people, including groups and organizations, and so they have become (as they shall be in this paper) the basis for the new approach to understanding human behavior.

It should be obvious by now that there is an essential in-
gredient in the McClelland theory upon which all improvement is
based, including the improvement of a CECO. That ingredient is,
of course, a desire on the part of an individual to want to im-
prove; and to improve is to change; and therefore a desire to
change is necessary if the balance of this paper is to serve its
intended purpose.

People resist change and therefore resist their own and their
organization's improvement. Why? Herbert Goodwin, industrial
consultant and MIT professor, says people only resist BEING
changed. What is the difference between resisting change and re-
sisting being changed? Let us see an example which has been ob-
served by me in classroom and industrial settings several times.
The problem: on 9 equally spaced dots placed in a square draw
4 connected straight lines without lifting your pencil.

```
        o     o     o

        o     o     o

        o     o     o
```

(Test yourself here if you would like.)
Now this problem is impossible to solve if you stay within the
square. The secret is to change the conception of the figure to
something other than a square like:
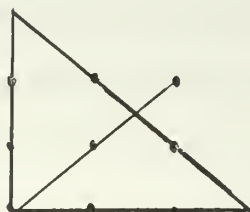
What do we learn from this little problem? First, most people, initially at least, do not think outside of established patterns; they do resist change. Second, if left to themselves many people eventually solve this problem and are perfectly happy with their solution. They will change if they think of the solution. Third, some people need hints to solve the problem and if the hints are given in a helpful way on more or less a collaboration basis (as opposed to an authoritative basis) the subjects are happy with the solution. Fourth, for those people who do not solve the problem and are told the solution, it becomes an object of resistance. They usually argue that the word square in the problem statement precludes the solution, or that the problem statement did not allow for going outside the square. Weak arguements to be sure, but none-the-less indications that people do resist BEING changed. How does one unfreeze (Schein's concept of unfreezing, changing, and refreezing) resistance to change? The answer seems to be a collaborative, partipative, helpful setting where the individual sees and realizes the need for change. As an aside here most or- ganization programs (civilian and military) usually neglect the unfreezing phase of change and are therefore doomed to mammoth resistance in the form of apathy, negligence, passivity, or out- right sabotage.

McClelland's theory implies a desire for change which we have just discussed. His theory also implies motive or need. It is said that man is a wanting animal, that his wants or needs are the motives for his behavior. If this is so, and there is good evidence to show it is, then if we know what man's needs are we can better predict his behavior. But what are his needs, and

which ones are operating at a particular time? Maslow attempts to

offer an answer with his theory of need hierarchy. In summary

this theory places needs in a spectrum from low order to high

order as follows: physical (hunger, thirst, sex, aggression),

safety, sociability, status, and self-actualization. From this

hierarchy man starts with the lowest order need not fulfilled and

emits behavior to satisfy that need. When the need is satisfied,

it is no longer a motivator (a satiated man no longer seeks food)

and man moves to the next higher order need and emits behavior

consistent with satisfying it, and so forth. From a practical

standpoint Maslow admits that there is not a clear cut line of

demarcation between needs and that more than one order of needs

may be operating at once. So, for example, with the need for

sociability partly satisfied, man may actually begin to feel a

need for status and exhibit behavior for both.

Because the implications of Maslow's theory are so great for

the Navy and industry, I endeavored to check its validity by de-

signing an analysis of panel survey data collected by Douglas Hall,

et al. The data basically measured changes in various need levels

over a five year period of 49 executives from industry. My design

statistically analyzed low and high need changes. My hypothesis

was Maslow's theory. As postulated, a preponderance of high order

need increases was accompanied by a reduction in low order needs.

What then are the implications here? Most important, I be-

lieve, is the fact that when an individual is making a living wage

in reasonably healthy and safe surroundings and jobs are relatively

plentiful so that he feels reasonably secure, you will not motivate

him much by offering him a little more money, or by painting the
employees lunch room, or by offering him a retirement plan. In
other words while your employees are looking to satisfy their
needs for sociability, status, or self-achievement you would be
trying to fill needs that are already satsified, and your reac-
tion is to wonder why the employees are not motivated. At this
point a question is always raised as to why employees are seemingly
always asking for higher pay, cleaner lunch rooms, and retirement
plans. The answer lies in the second part of Maslow's theory
which postulates that when higher order needs are thwarted, the
individual reverts to lower order needs in frustration. Again
to paraphrase, when the climate of an organization thwarts soci-
ability (the boss hates water cooler get-togethers or people are
strung out on a mass production assembly line) or the ability to
achieve status or achievement, the result may be harassment tactics
at the bargaining table with employees demanding seemingly ful-
filled needs; and, unfortunately, relenting to these demands only
leading to further similar demands with no increase in motivation.

At this point it would appear that we must investigate money
as a motivator. Certainly in the "good old days" when the buying
power of wages was relatively low and a little extra money repre-
sented the difference between meat or no meat meals for the
family, money was a good motivator. In other words it represented
for many people a way to satisfy a very low order need - hunger.
Today in most of our thriving industrial communities money still
appears as a highly sought after prize. Why, if for the most
part hunger has been satisfied? One answer has already been

offered, namely, reverting to low order needs in frustration.
Another seems to be that money can also satisfy the need for
status, a relatively high order need, which is probably active in
most industrial settings today and may not be satisfied on the job
itself. Money can buy a second car, a dishwasher, a swimming pool
or other status symbols; or it can just make individuals feel good
to know they make a little more than the next fellow. Particularly
applicable here is the reason why until recently the government has
successfully underpaid its military officer corps and yet retained
good personnel. In effect status, prestige, and self-achievement
were offered by high level decision making billets, relative
autonomy, large quarters, chauffeured vehicles, house boys, the
uniform, and so forth. Today there appears to be reduction in
all these status and achievement symbols and so "comparable
salaries" may be the modern answer to satisfy high order needs
for military officers.

One final thought appears appropriate in this chapter on
individuals before we embark on groups and organizations in the
next chapter. It would seem that most adults (particularly males)
are constantly rebelling against the authority figure of their
fathers and are therefore constantly striving for independence.
It has also been shown empirically that individuals are more per-
manently influenced by their peers than by their superiors (father
figures). It is evident that a serious conflict thereby exists in
industry and the military where, for the most part, dependence and
authority are stressed. This serious conflict may account for
much of the unexplained behavior prevalent in the working environ-
ment today. The answer to the dilemma may lie in a realization by

superiors that <u>inter</u>dependence up and down is the necessary rela-
tionship which exists when tasks are accomplished successfully,
and membership as well as leadership is required of any superior
in a task-oriented group.

Chapter III - SOME THEORY ABOUT STYLES OF MANAGEMENT

AND ORGANIZATIONAL SYSTEMS

(Note: A great portion of the ideas in this chapter are taken
from the lectures and writings of the late Douglas McGregor,
former president of Antioch College and MIT professor, and former
head of the Organizational Studies Group at the Sloan School of
Management, MIT.)

A scientist or engineer takes the laws of nature and attempts

to adapt to them. For example, the fact that water naturally

flows downhill is used as a great asset in countless ways; fur-

thermore, when it is desired that water flow uphill there are

again adaptations of nature which will cause this. Note that the

scientist or engineer does not ignore the natural propreties of

gravity or water or forever damn Mother Nature for casting things

the way they are, but rather he selectively adapts to them for all

to benefit. Now take that same scientist or engineer and put him

in a situation where his problem is people and diabolically his

approach may be entirely different. In the first place he will

not know nearly as much about people as he does about water, and

what he does know he will be likely to have found by "experience"

rather than by precise measurement. For the most part, he will

be operating with considerably less knowledge about people than he

would dare to about water if, say, he were investigating a hydro

plant or a pump. Although he tolerates Mother Nature completely

for physical phenomena, he is usually a lot less forgiving where

people's actions are concerned, tending to blame them directly for

their misdeeds.

McGregor attempts to explain this apparent breakdown in

method when dealing with human problems by explaining that most

people, including managers and CECO's, operate with an inherited
and traditional set of assumptions about people which are the
result of unskilled observation about the nature of man. He
calls these erroneous set of assumptions the assumptions of a
theory X style of human relations. In summary they are as
follows:

1. The average person has an inherent dislike for work
    and will avoid it if he can.

2. Most people must be coerced, controlled, directed, or
    threatened to get them to put forth adequate effort
    toward achievement.

3. The average person prefers to be directed, wishes to
    avoid responsibility, has little ambition, and wants
    security above all.

But maybe McGregor is wrong. After all we do see people
act just as the assumptions describe. Did the theory X style of
relations become paramount because people really are that way?
There is good evidence to believe that this is not the case;
rather, people exhibit the theory X behavior only because group
leaders and organization managers treat them in a way which pro-
motes such behavior. The evidence, as mentioned above, is mount-
ing. Experiments (equivalent in method and value to controlled
scientific experiments) are being conducted daily in organization
and group behavior, and the significant fact appears to be that
when a theory X style of management is removed from the setting,
the respondents do not behave in a manner consistent with the
theory X assumption.

While we are talking about theory X, we should investigate
what some of the characteristics are of this theory in organiza-
tions such as industry and the Navy. First of all, we must realize
that a theory X style of management grew up from the days when
low order needs (Maslow again) were operating in most factories
and organizations throughout the world; and because people were
hungry it apparently worked quite well. It is certainly an easy
line to take and if it works of course it will be continuously
used. I say it is an easy line because it is based on the tradi-
tional hierarchy structure of the church and the military;
if the man below you in the organization does not do what he is
told you excommunicate him, shoot him, or have other forms of
serious punishment available. It is easy to see why theory X
also worked so well in factories in the early 1900's, for here
authority and power were matched at every level; if authority
spoke there was power to enforce it.

Another characteristic of theory X is the incentive system.
This basically operates on the assumption that people will do
more for money. But let us really see what happens in a piece-
work incentive system. The boys in the machine shop are slow
on lathe work so management offers a piece rate. Since the boys
in the shop have social needs they do not want to lose the friend-
ship of their co-workers by being rate busters, so they get to-
gether and design a technique which will increase the capacity 20
per cent. However, they hide the technique from management and
take turns sharing the increased returns. In the meantime the
foreman of the shop (who does not share in piecework) complains
that the men are outdrawing him and the punch press operators

also want a piece rate for their work. The union backs this demand. Meanwhile, management, attempting to gain some sort of equilibrium, decides to adjust the lathe piece rate (or eliminate it) and the lathe workers strike. But they are not worried about going back to work because the extra money they have made in the lucrative piece rate racket is enough for some of them to put a down payment on some lathes; thus, they now have a moonlighting shop where they can compete with the daytime boss on the same parts, but their production is up 50%.

The above description is not exaggerated. Many similar situations are taking place in industry and civil service now. It is just such situations which prompted Leo Moore, consultant and MIT professor, to describe some management as, "A series of morning meetings to clear up the mess made yesterday in order to get on with the afternoon meetings to make the mess for tomorrow." My own experience in a factory that I visited regularly on a student-consulting basis bears out the fact that circumstances like those described above do occur, and further, how difficult it is to change management's assumptions. In an almost identical case I was asked what management should have done in the first place. My answer was involvement; to involve the lathe workers in a design for improving production by merely asking them to do so. The assistant production superintendent cut me off quickly. He said, "We've got involvement! We tell them to do something and they're involved doing it."

Many adjustments have been made to theory X by management to try to ward off some of the obvious bad effects it produces, but

these adjustments have been made without the accompanying changes
in basic theory X assumptions about people. Consequently, most
of these adjustments have been frustrating, at the very least.
One such adjustment was the advent of soft management after World
War II. This era was characterized by human relations training
for supervisors, bigger and better company picnics, employee
fringe benefit programs, and so forth. Most soft management
techniques failed, possibly because they were perceived by em-
ployees as manipulative measures without the benefit of a new
theory about people and their higher order needs. But their
failure is most severely felt today in the association made by
management will all forms of organizational improvement. The
words of hundreds of managers are still ringing down the halls of
industry, "Look at all we gave them and all we got was more
strikes, grievances, slowdowns, and demands at the bargaining
table."

Possibly one of the greatest disappointments for management
comes in an era of decentralization. People who criticize the
criticism of theory X are quick to point out that many times in
decentralization when responsibility is delegated to subordinates
they fail. The reasons given are that they were in fact indolent,
or they did not in fact want the responsibility, just as the
theory X assumptions say. But let us see how decentralization
and delegation are actually carried out. Immediately after
establishing a new department, factory, or field office, the very
next step is the imposition of whole and elaborate series of
controls, "Just so we know how you're doing". The basic mis-
trust is immediately evident, but what is worse the newly

decentralized facility immediately begins defensive techniques for beating the system. A great part of their resources are put into making themselves look good instead of determining what is best for the company. In industry the J. I. C. file is common-place; that is Just In Case someone asks. "Give the boss what he wants to hear" is an over-used doctrine. And again the predomi-nant reason for the failures in decentralization (which in itself has great merit) is the basic assumption that people are lazy, they must be stimulated, and they do not really want respons-ibility; elaborate controls are necessary to keep them in line.

If theory X assumptions are wrong about people, what are the right assumptions? McGregor offers the following theory Y assumptions:

1. Physical and-mental work are as natural as play or rest. Work can be a source of satisfaction and will be volun-tarily performed, or it can be a source of punishment and avoided if possible.

2. Man will exercise self-control and self-direction in the service of organizational objectives to which he is com-mitted.

3. Commitment to objectives is a function of the rewards associated with their achievement. The most significant of such rewards (satisfaction of ego and self-actualiza-tion) can be direct products of effort directed toward organization objectives.

4. People under proper conditions not only accept but seek responsibility.

5. The capacity to exercise a high degree of ingenuity and
    creativity toward the solution of organization prob-
    lems is widely distributed among the population.

6. The intellectual potential of the average person in in-
    dustrial life today is being only partially utilized.

Will people respond consistently with the theory Y assump-
tions if they are used in organizational settings? Again the
field and laboratory experiments being conducted indicate they
will, and if we believe Maslow we can see why; in today's times
low order needs are in most cases satisfied and the high order
needs are operating. Theory Y with its opportunities for self-
actualization in the form of true responsibility, creativity,
ingenuity, and achievement meets the high order needs of people.
For the same reasons theory X will not work, and further it will
not work because authority and power no longer operate together
at all levels. Expanded job opportunities, unions, the Civil
Service Commission, and political influence all operate to remove
some or all of the power from certain positions of authority so
that the enforcement power of old just is not there.

To summarize theory Y one might say that if affords the
possibility of integrating human and organization goals so that
both can be satisfied simultaneously. It provides an environment
which promotes cooperation instead of competition. It promotes
growth and development of people and organizations and thereby
makes them evermore flexible to meet the rapidly changing tech-
nology we face. It provides an organization value system which
rewards participation and participative management. And lastly,

it creates a climate in which a man can give to his organization a fuller measure of his potential.

One final word on what theory Y is <u>not</u>. It is not an abdication of authority and responsibility so that everyone is now in your act and running your program. In fact it is a much harder line to follow than theory X because it places the responsibility for failure squarely on management's shoulders rather than allowing poor human resources to be used as an excuse for bad performance.

Chapter IV - SOME THOUGHTS ON MANAGEMENT DEVELOPMENT

As we have seen in the previous chapter the traditional style of theory X management is one in which the boss, superior, or manager attempts to control the human resources available to him; on the other hand, the theory Y style attempts to create a climate or environment which will release the full potential of people. With the data seemingly indicating that the latter style will produce better results in most working environments, and with the certain knowledge that theory Y is far better geared to keep pace with a rapidly changing technology, let us proceed to investigate just how it is possible to grow theory Y managers. It is hoped that for the CECO this chapter and the one that follows will present some new and original solutions to our ever present challenge to be better managers capable of complete flexibility ready for our modern times.

There is an old saying that managers are born and not made. The acceptance of such an idea would preclude any further work in management development in favor of some sort of controlled mating of presidents of large companies with career girls. In fact there is substantial evidence to indicate that there are great possibilities for growing managers, and to support this idea we shall again rely on the McClelland school which is in effect saying that a desire for growth accompanied by sufficient reinforcement for new attitudinal concepts can produce change.

We begin our outlook on management development with Schein's thoughts concerning the fact that to improve a man's management capability requires above all an attitude change on his part.

Most management development today is concerned with skills and knowledge; that is, computer programming, sales, marketing, accounting, production, controls and technical improvement. Without attempting to minimize the importance of most of these skills they are being stressed in colleges, universities and training programs at the expense of material which would provide attitudinal changes in managers; changed assumptions about the true nature of man, if you will.

If we are not stressing the right kinds of material in our institutions of higher learning and training courses, what would be better? To find out let us take a look at how an engineer is trained. Beginning with his early school years and up through about his second year of college he is given ample study in the pure sciences of mathematics, physics, chemistry, electricity, and so forth. At about his third year in college his field begins to narrow toward some specialty and he builds practical knowledge on a solid theoretical base. Now this is all satis-factory if he remains an engineer devoted to the technical aspects of creating things out of concrete and steel. If, however, he transgresses into the field of engineering management, as many mature persons do (and all CECO's do), he finds that the practical application of managing people is based on things learned in the playground, on the athletic field, in fraternities, or from the novelist. To make matters worse, particularly for the CECO, the engineering manager finds that more of his time and energy are being spent on peoples' problems than on technical ones. And even at times when he begins to boil down what seems a pure en-gineering dilemma, someplace in the entanglement is a human problem

which is the key to the solution. It would appear, therefore, that just as we would not allow an engineer to miss high school and college physics, we should not allow an engineering manager to miss an adequate theoretical basis in social sciences, psychology, and organizational behavior. The point here is that there is actual social science theory to present and draw upon and we no longer need wait for managers to be born or rely solely on some rather indeterminate and non-uniform thing called experience.

In order to portray something of the magnitude of the problem in merely overcoming the barrier of complacency (and therefore no desire for change, growth, and development in the people side of the management field), Professor Evan of MIT conducted a survey of approximately 100 scientists, engineers, and managers on the subject of obsolescence. To summarize, the scientists and engineers graded themselves and their contemporaries as growing more and more obsolete in a rapidly changing technology. The managers, however, saw themselves as just the opposite - very much up to date. Strikes, militant unions, slowdowns, worker apathy, and increased demands just do not bear out the managers' high regard for themselves.

What is the answer? Put everybody through a six-week course in social science? Unfortunately, the simple logic of running people through a course does not produce the attitude and assumption change required to obtain the necessary results. This procedure was the mistake of the human relations training of the Fifties, where literally thousands of people were given short and

long courses of unplanned, poorly timed, unrelated material that they found "wouldn't work back in the shop".

Any program of attitude change that would be undertaken for CECO's must be a well conceived, well planned, unhurried program that is the product of the best resources in the field today. Such a program would of course have a long and a short plan. The long range plan might include such things as:

1. A requirement on engineering and management schools to afford proper study in the fields of social science proportionate to the effort expended in solving human problems on the job.

2. A cross fertilization with other than pure engineering degrees in the CEC, considering possibly people with degrees in industrial psychology or sociology. (As an aside John Wear of UCLA has found non-engineers and non-scientists to be very much more receptive to new attitudes in management, but also found that with engineers and scientists, once the barrier is penetrated, they are much more skilled in applying changed attitudes).

3. Alter the post-graduate program to include a sufficient number of participants in Organizational Studies.

As for short range plans, which would begin to show effects within possibly a year or two, they might include:

1. Establishment of an Organizational Studies Group at the CEC Officers School, which would not only function for new officers coming into the Corps, but would serve as the nucleus for all activity of this type in the Corps and possibly the Navy as a whole.

2. Hire a sufficient number of civilian industrial psychologists so that they could be available for consultation with CECO's at Bureau and field offices similar to the way transportation, design, and maintenance personnel are available.

3. Contract with organizational psychologists and consultants to help organize general preventive type programs, and specifically for trouble spots.

4. Take advantage of the many sensitivity training laboratories (such as those sponsored by the National Training Laboratories) and grid training laboratories. (Blake's grid labs are designed to provide insight into one's style of management and provide data as to the effects such a style has on people.)

5. Provide for a program of training and assignments which allows the maximum amount of career planning in the hands of the individual himself under the assumption that only a person who learns to manage himself can manage others.

In summary, it is noteworthy that the leaders in industry and education are today speaking a new language of grid labs, sensitivity training, theories X and Y, interpersonal effectiveness, participative management, growth climate and so forth. CECO's have an opportunity to be charter members in this new attitudinal movement to improve the industrial climate.

Chapter V - THE NEW RELATIONSHIP

Mr. Davis, the Industrial Relations Officer for the National Laboratory for Space Technology opens some of his guest lecture series by stating, "The purpose of management is to NOT demotivate." His point is, as in theory Y, that people are already motivated to be creative and to self-actualize and that if the climate is right (or at least not stiffling) they will just as well meet their needs for these values at work where the benefits are consistent with the goals of the organization. How the CECO can NOT demotivate, and in fact how he can better create a climate or environment which will foster the growth and development of his organization and his people is the purpose of this chapter. Naturally many of the cues and hints for this improvement and change have already been stated in previous chapters, and so here we will merely attempt to put a better handle on the subject and get it in proper perspective.

Possibly one of the greatest areas of neglect in management in our hurried world of today is that of the relationship between people involved in an organization. Because of pressing deadlines and task-oriented operations, insufficient time is spent on dealing with such things as feelings, conflicts, anxieties, trust, and understanding. It is common in conferences today to hear the phrase, "All right fellas, let's keep feelings out of this thing", with the result that conflict, anxiety, and distrust all go underground only to plague the protagonists and the organization in countless and seemingly unrelated ways. It will be noted and acknowledged that this method of suppressing feelings

and compromising conflicts usually has short range gains; that is, some quick, workable solution usually comes out of such management procedures and thereby deludes everyone into a state of elation and complacency which tends to perpetuate such methods. The fly in the ointment, which rarely, if ever, is traced to its source, is the fact that these same short range gains were taken at the expense of long range growth of the individuals involved and at the expense of the long range improvement of the organization.

Now the concept of surpressing feelings and conflict go hand and glove with assumptions that authority is the key to management problems, for what the boss is really saying when he keeps feelings out of a discussion is, "If you two fellas don't settle your differences, I'll settle them for you." But we have already seen that power many times does not reside with authority, and so it is with the communication links, the informal cliques, and the informal working arrangements; they do not many times follow the organization's authoritative structure and so the boss may, in fact, NOT be able to settle the differences as threatened. To compensate for the fact that suppressing feelings and conflict is just not working as a sound method to handle organization problems, the concept of Managing Conflict is introduced. Here feelings are treated as facts and the manager is conceived as being in a role where he promotes getting conflicts out on the table where they can be discussed and understood, where trust can be developed because of openness, and where the relationship between people can be worked on as problems. In

effect the manager is now cast in the role where he is a catalyst

to help the organization,which is a living, dynamic system, solve

its owns problems. He aids and fosters the problem solving

techniques of the organization and maintains the proper balance

of work on tasks to work on relationships among people.

To relate the concepts above to the position of a CECO in a

typical Civil Service organization we need only recall our frus-

tration at times when agencies other than CECO's in authority

actually supply the power, communication, and work arrangements

to influence the organization. To dogmatically rely on authority

to manage the organization usually leads to over control or re-

organization with a resultant lessening of influence, and

eventually the negating of any management improvement potential

the CECO brings to the organization. Why is this so? Because

there are certain "givens" which are facts of life that must be

selectively adapted to or run the risk of failure. The fact that

power no longer resides with authority cannot be ignored, despite

the fact that we wish for it to be overlooked. Authority has

its rightful place in certain truly military organizations and it

works in a good old traditions fashion in those settings, but it

is not appropriate in many civil service environments simply

because the power necessary to maintain it just is not there.

This is not to say that authority is never appropriate in Civil

Service. There certainly are times when it is necessary, and

the secret of its use seems to be to use it not only because it

seems necessary, but as a second criterion, when it will work.

This thesis does not propose the abdication of authority, but

it does propose that a CECO, or any manager, have the flexibility

to work from a position of influence when authority is either not appropriate or when it will not work; and further to realize that authority is many times associated with short term gain at the expense of long range growth and development.

If traditional authority is not effective in many situations for the CECO and if a style of managing conflict might promote greater effectiveness for him in the environment of Civil Service, then what should his relationship be to the organizations in which he is placed? Lippit and Watson, the authors of Planned Change and Richard Beckhart, organizational consultant, might conceive of the CECO as an agent of change. LCDR Stedman, a colleague of mine in the Sloan School, has speculated that since a CECO moves from assignment to assignment he has the built-in capability of being a consultant to each Civil Service organization to which he is sent. Now up to this point these concepts do not sound new. After all CECO's have promoted change everywhere they have been; if putting across new ideas to an organization can be considered as consulting, then they have done that also. Is that what Lippit, Watson, Beckhart, and Stedman mean by being a consultant or change agent? Let us examine a synthesis of their ideas and see.

First, a true consultant (change agent can be used interchangably) is more often than not an outsider who attempts to help the organization system learn to cope with its own problems and thereby not become dependent on him for the solutions to problems. The boss or management "consultant" firm who conceives of, let us say, a reorganization to solve a company problem are not consultants, but in effect problem solvers. Now the difference here is

that while their solutions may be perfectly good ones, the organization or the people in it did not learn any new coping or problem solving techniques. In effect there was no growth or improvement of relationships or technical problem solving abilities. However, even worse is the result of the adage, "People tend to support what they create." If the people have their problems solved for them, it follows that they did not create the solutions with the result that they regard the solutions with apathy, passivity, resistance, and, at times, outright sabotage. One can think of tens of management programs, large and small, which organizations have resisted, not necessarily because the programs were bad, but because they were imposed.

Second, a true consultant realizes the required phases of change and he has a planned approach which will probably include a diagnostic and strategic phase as follows:

1. Diagnostic

(a) Determine the need to change both from the standpoint of desirability and readiness. Sometimes change is considered when not desirable, and, at times, change is required without readiness. Promoting openness in discussion will many times increase the readiness for change.

(b) Determine the true nature of the problem. For example, quality control is often mistaken for the problem when, in fact, the underlying trouble is peoples' attitudes.

(c) Determine the appropriate organization system involved. Often a segment of the organization chart is mistakenly chosen as a functional area to work on rather than asking, "Who in this whole organization is in this problem?"

(d) Given many segments of the organization which might require a particular change, determine the segment most vulnerable and chose it for a pilot change program which other segments can emulate.

(e) Determine own resources and motivation and plan the strategy accordingly. Many times a consultant's own resources for influence are underestimated or his own motivation begins to control his actions. The most common case of this is where the consultant feels insecure about his position and comes out very authoritative in order to compensate for his feeling of inadequacy.

2. Strategy

(a) Determine appropriate change objectives: not out of sight and yet distinct enough to be measurable. Here target or goal setting rather than evaluation of the system can be participated in by the organization to the betterment of all and toward hastening the change process.

(b) Determine the roles each participant (including the consultant) is to play in the change process.

(c) Determine the leverage points of the system; that is, what access do you have to whom and what linkage does that segment have to the other segments?

(d) Initiate the plan.

And so what is in effect being proposed here is that the CECO see in the role of a true consultant the opportunity for flexibility wherein he would possess alternatives other than the traditional one of authority. If he played the role of consultant, it is possible that by the use of diagnostic skills he could better help the organization system cope with the correct problem, thereby promoting its growth and creative potential. Further, there would be less of a tendency for the organization to become dependent on him, thereby stiffling its problem solving ability after his relationship is terminated. Since, as a consultant he does not impose problem solutions on an organization, the CECO would probably be accepted more openly the the on-going Civil Service organization, thereby establishing a healthy relationship earlier, to the betterment of both.

In summary, it is believed that a CECO approaching a new billet as a true consultant could better apply those desirable theories of organization behavior presented in this thesis and thereby increase his managerial effectiveness for the betterment of the Civil Service, the Civil Engineer Corps, and the United States Navy.
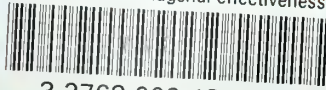
BIBLIOGRAHY

Argyris, C. "Explorations on Consulting - Client Relationships", Human Organization, Vol. 20, No. 3. (1961).

Argyris, C. Interpersonal Competance and Organization Effectiveness, Homewood, Illinois: Dorsey Press, 1962.

Beckhart, R. The Leader Looks at the Consultative Process, Leadership Resources, Inc., 1961.

Beckhart, R. An Organization Improvement Program in a Decentralized Organization, unpublished class study paper, 1963.

Bennis, W. G., "Goals and Meta-Goals of Laboratory Training," Human Relations Training News, Vol. 6, No. 3, (1962).

Bennis, W. G. et al. Interpersonal Dynamics, Homewood, Illinois: Dorsey Press, 1964.

Bennis, W. G., "Organization Development and the Fate of Bureaucracy," invited address to the American Psychological Association, Sept. 1964.

Blake, R. R. and J. S. Mouton. The Managerial Grid. Houston, Texas: Gulf Publishing, 1964.

Blou, P. M. The Dynamics of Bureaucracy, Chicago: University of Chicago Press, 1955.

Deutsch, M. Cooperation and Trust, Lincoln, Nebraska: University of Nebraska Press, 1962.

Freud, S. The Basic Writings of Sigmund Freud, New York: The Modern Library, 1938.

Goffman, E., "On Face-Work," Psychiatry, Vol. 18, No. 3, 1955.

Herzberg, F. et al., The Motivation to Work, New York: Wiley, 1959.

Homans, G. C., "Social Behavior as an Exchange." American Journal of Sociology, Vol. 63, No. 6, 1958.

Leavitt, H. J. Managerial Psychology, Chicago: University of Chicago Press, 1964.

Leavitt, H. J. and Pondy. Readings in Managerial Psychology, Chicago: University of Chicago Press, 1964.

Lippitt and Watson. The Dynamics of Planned Change, New York: Harcourt Brace, 1958.

Maslow, A. H. Motivation and Personality, New York:
     Harper, 1954.

McClelland, D. The Achieving Society, Princeton, New Jersey:
     D. Van Nostrand, 1961.

McClelland, D, "Business Drive and National Achievement,"
     Harvard Business Review, July-August 1962.

McClelland, D. Toward a Theory of Motive Acquisition,
     Cambridge, Mass.: Harvard University Press, 1964.

McGregor, D. The Human Side of Enterprise, New York:
     McGraw-Hill, 1960.

Murphy, G. Human Potentialities, New York, Basic Books,
     1958.

Riley, M. W. Sociological Research, New York; Harcourt Brace,
     1963.

Rogers, C. On Becoming a Person, Boston: Houghton Mifflin,
     1961.

Schein, E., "Forces Undermining Management Development,"
     California Management Review, Summer 1963.

Schein, E., "How to Break in the College Graduate," Harvard
     Business Review, Nov.-Dec. 1964.

Schein, E., "Management Development as a Process of Influence,"
     Industrial Management Review, May 1961.